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WORK EXPERIENCE

College of Computing and Data Science, Nanyang Technological University (NTU)	Singapore
Research Fellow	Apr 2025 – Present
Research Assistant	Oct 2021 – Mar 2025
Research Interests: Graph Representation Learning, Brain Network Analysis, Medical Image Analysis	

EDUCATION

Nanyang Technological University (NTU)	Singapore
PhD in Computer Science, advised by Yiping Ke	Oct 2021 – Feb 2025
Thesis: Brain Network Analysis by Graph Representation Learning	
Beihang University (BUAA)	Beijing, China
BS in Software Engineering, advised by Jie Tang	Sep 2016 - Jun 2020

PUBLICATION (* indicates equally contributions, # indicates the corresponding author)

Journal Papers

- Jiaying Xu[#]**, Qingtian Bian, Xinhang Li, Aihu Zhang, Yiping Ke, Miao Qiao, Wei Zhang, Wei Khang Jeremy Sim, and Balázs Gulyás.
Contrastive Graph Pooling for Explainable Classification of Brain Networks.
In *IEEE Transactions on Medical Imaging (TMI'24)* (IF: 11.0).
PREMIA Best Student Paper Honourable Mention Award
- Jiaying Xu[#]**, Jinjie Ni, Yiping Ke.
A Class-Aware Representation Refinement Framework for Graph Classification.
In *Information Sciences* (IF: 8.2).
- Jiaying Xu[#]**, Mengcheng Lan, Xia Dong, Kai He, Wei Zhang, Qingtian Bian, Yiping Ke
Multi-Atlas Brain Network Classification through Consistency Distillation and Complementary Information Fusion.
In *IEEE Journal of Biomedical and Health Informatics (JBHI'25)* (IF: 6.7) (Under Major Revision)
- Han Lei[#], **Jiaying Xu**, Jinjie Ni, Yiping Ke.
Rethinking the Message Passing for Graph-Level Representation Learning in a Category-Based View.
In *Engineering Applications of Artificial Intelligence (EAAI'25)* (IF: 6.8).
- Tieying Li, Lingdu Kong, Xiaochun Yang[#], Bin Wang, **Jiaying Xu**.
Bridging Modalities: A Survey of Cross-Modal Image-Text Retrieval.
In *Chinese Journal of Information Fusion*, 2024.

Conference Papers

- Jiaying Xu^{*}**, Yongqiang Chen^{*}, Xia Dong, Mengcheng Lan, Tiancheng Huang, Qingtian Bian, James Cheng, Yiping Ke.
BrainOOD: Out-of-distribution Generalizable Brain Network Analysis.
In *Proceedings of the 13th International Conference on Learning Representations (ICLR'25)*.
AI4X Conference Oral Presentation
- Jiaying Xu[#]**, Kai He, Mengcheng Lan, Qingtian Bian, Wei Li, Tieying Li, Yiping Ke, Miao Qiao.
Contrasformer: A Brain Network Contrastive Transformer for Neurodegenerative Condition Identification.
In *Proceedings of the 33rd ACM International Conference on Information and Knowledge Management (CIKM'24)*.
- Jiaying Xu^{*}**, Aihu Zhang^{*}, Qingtian Bian, Vijay Prakash Dwivedi and Yiping Ke.
Union Subgraph Neural Networks.
In *Proceedings of the 38th Annual AAAI Conference on Artificial Intelligence (AAAI'24)*.
- Jiaying Xu^{*}**, Yunhan Yang^{*}, David Tse Jung Huang^{*}, Sophi Shilpa Gururajapathy^{*}, Yiping Ke, Miao Qiao, Alan Wang, Haribalan Kumar, Josh McGeown, and Eryn Kwon.
Data-Driven Network Neuroscience: On Data Collection and Benchmark.
In *Proceedings of the 37th Conference on Neural Information Processing Systems (NeurIPS'23)*.
- Mengcheng Lan, Chaofeng Chen, Yue Zhou, **Jiaying Xu**, Yiping Ke, Xinjiang Wang, Litong Feng, Wayne Zhang.
TextSeg: Reimagining Image Segmentation as Text Generation.

- In *Proceedings of the 13th International Conference on Learning Representations (ICLR'25)*.
- Qingtian Bian, Marcus Vinicius De Carvalho, Tieying Li, **Jiaxing Xu**, Hui Fang, Yiping Ke.
ABXI: Invariant Interest Adaptation for Task-Guided Cross-Domain Sequential Recommendation.
In *Proceedings of the ACM Web Conference (WWW'25)*.
- Tieying Li, Xiaochun Yang, Yiping Ke, Bin Wang, Yinan Liu, **Jiaxing Xu**.
Alleviating the Inconsistency of Multimodal Data in Cross-Modal Retrieval.
In *Proceeding of the IEEE International Conference of Data Engineering (ICDE'24)*.
- Mengcheng Lan, Xinjiang Wang, Yiping Ke, **Jiaxing Xu**, Litong Feng, and Wayne Zhang.
SmooSeg: Smoothness Prior for Unsupervised Semantic Segmentation.
In *Proceedings of the 37th Conference on Neural Information Processing Systems (NeurIPS'23)*.
- Qingtian Bian, **Jiaxing Xu**, Hui Fang, Yiping Ke.
CPMR: Context-Aware Incremental Sequential Recommendation with Pseudo-Multi-Task Learning. In *Proceedings of the 32nd ACM International Conference on Information and Knowledge Management (CIKM'23)*.
- Xinhang Li, Xiangyu Zhao, **Jiaxing Xu**, Yong Zhang[#], Chunxiao Xing.
IMF: Interactive Multimodal Fusion Model for Link Prediction.
In *Proceedings of the ACM Web Conference (WWW'23)*.

TEACHING EXPERIENCE

School of Computer Science and Engineering, Nanyang Technological University	Singapore
Teaching Assistant of <i>Undergraduate Final Year Project</i>	Oct 2021 - Present
School of Software, Beihang University	Beijing, China
Teaching Assistant of <i>Practice of Programming</i>	Aug 2018 - Sep 2018

PROFESSIONAL EXPERIENCE

Automatic Drive Group, SenseTime Group Limited.	Beijing, China
Research Intern	Sep 2020 – Jan 2021
Knowledge Computing Group, Microsoft Research Asia (MSRA)	Beijing, China
Research Intern, advised by Börje Karlsson	Dec 2019 - Jun 2020
Big Data Mining Team, Microsoft Research Asia (MSRA)	Beijing, China
Research Intern, advised by Börje Karlsson	Mar 2019 - Jun 2019

CONFERENCE/JOURNAL REFEREE

- International Conference on Machine Learning (ICML), 2025
- International Conference on Learning Representations (ICLR), 2025
- Conference on Neural Information Processing Systems (NeurIPS), 2024
- ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD), 2025
- AAAI Conference on Artificial Intelligence (AAAI), 2024, 2025
- International Joint Conference on Artificial Intelligence (IJCAI), 2025
- The Web Conference (WWW), 2025
- International Conference on Artificial Intelligence and Statistics (AISTATS), 2025
- International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), 2025
- International Conference on Medical Imaging and Computer-Aided Diagnosis (MICAD), 2024
- Learning on Graphs Conference (LOG), 2024
- IEEE Transactions on Neural Networks and Learning Systems (TNNLS), 2024
- Pattern Recognition, 2024
- Neural Networks, 2023 - 2025
- Engineering Applications of Artificial Intelligence (EAAI), 2022, 2024, 2025
- Memetic Computing (MEME), 2021

HONORS & AWARDS

PREMIA Best Student Paper Honourable Mention Award	2024
Software College Innovation and Entrepreneurship Scholarship	2018, 2019
Software College Excellent Student Leader Award	2017, 2019
Yuanhang Undergraduate Summer Overseas Research Scholarship	2019